

Multilayer Ferrite Chip Inductors for Power Line

Application Field

MPI series is suitable for power line choke because of its excellent direct current

PC/ Notebook

PDA

Digital camera

DVD

Features

The MPI series is magnetically shielded chip based on multilayer process.

New magnetic material is developed to get excellent direct current characteristics.

This series has larger rated current than conventional MFI series.

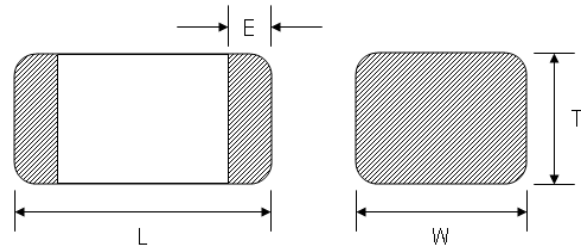
Low DC resistance is realized.

The cross talk characteristics are excellent because of the magnetically shielded

Directions

Dimensions and footprint (Unit : mm)

- ◎ Impedance Range : 0.11 to 6.8 μ H
- ◎ Operating Temperature Range : -55°C to +125°C
- ◎ Soldering Method : Reflow or Wave Soldering
- ◎ Packaging Method : Tape & Reel (per EIA Specifications)
- ◎ Storage Temperature : -40°C to +85°C , 70% RH Max



Unit : mm(inches)

Size	Length(L)	Width(W)	Thickness(T)	Electrode Width(E)
MPI-100803	1.0±0.20(0.040±0.004)	0.8±0.20(0.031±0.006)	0.30(0.012)max	0.3±0.20
MPI-160803	1.6±0.20(0.063±0.006)	0.8±0.20(0.031±0.006)	0.30(0.012) max	0.4±0.30
MPI-201205	2.0±0.20(0.079±0.008)	1.2±0.20(0.047±0.008)	0.50(0.019) max	0.5±0.30
MPI-201610	2.0±0.20(0.079±0.008)	1.6±0.20(0.063±0.006)	1.00(0.039) max	0.5±0.30
MPI-252005	2.5±0.20(0.098±0.008)	2.0±0.20(0.079±0.008)	0.55(0.021) max	0.5±0.30
MPI-252010	2.5±0.20(0.098±0.008)	2.0±0.20(0.079±0.008)	1.00(0.039) max	0.5±0.30
MPI-252012	2.5±0.20(0.098±0.008)	2.0±0.20(0.079±0.008)	1.20(0.047) max	0.5±0.30
MPI-321608	3.2±0.20(0.126±0.008)	1.6±0.20(0.063±0.006)	0.90(0.035) max	0.5±0.30
MPI-322507	3.2±0.20(0.126±0.008)	2.5±0.20(0.098±0.008)	0.70(0.027) max	0.5±0.30
MPI-322510	3.2±0.20(0.126±0.008)	2.5±0.20(0.098±0.008)	1.00(0.039) max	0.5±0.30
MPI-322512	3.2±0.20(0.126±0.008)	2.5±0.20(0.098±0.008)	1.20(0.047) max	0.5±0.30

Product Detail

Electrical Characteristics			Test Instruments
Z	(Ref. Page 7~10)	TEST FREQ : (Ref. Page 7~10)MHz TEST LEVEL : 250 mV	HP4291B RF IMPEDANCE / MATERIAL ANALYZER HP4338A/B MILLIOHMETER Agilent 8720ES S-PARAMETER NETWORK ANALYZER HP6632B SYSTEM DC POWER SUPPLY
θ	NA		
SRF	NA		
DCR	(Ref. Page 7~10)		
IDC	mA (Ref. Page 7~10)		

Part Number Code

MPI - 160803 - R25 K
1 2 3 4

- 1、Product Code
- 2、Dimensions Code
- 3、Inductance = Decimal Point
- 4、Tolerance : K = ±10%、M = ±20%、N ±30%

Specification

Part No.	Inductance (μH)	TEST FREQ. MHz	SRF(MHz) Min.	DCR(Ω) Max	Rated Current Max.(mA)
MPI-100803-R40	0.40	5	230	0.17±30%	250

Part No.	Inductance (μH)	TEST FREQ. MHz	SRF(MHz) Min.	DCR(Ω) Max	Rated Current Max.(mA)
MPI-160803-R25	0.25	5	250	0.17±30%	500
MPI-160803-R40	0.40	5	70	0.23±30%	350

Part No.	Inductance (μH)	TEST FREQ. MHz	SRF(MHz) Min.	DCR(Ω) Max	Rated Current Max.(mA)
MPI-201205-1R0	1.00	5	90	0.12±30%	800

Part No.	Inductance (μH)	TEST FREQ. MHz	SRF(MHz) Min.	DCR(Ω) Max	Rated Current Max.(mA)
MPI-201610-1R2	1.20	5	100	0.11±30%	1100
MPI-201610-2R2	2.20	5	90	0.11±30%	1100
MPI-201610-3R0	3.00	5	80	0.13±30%	1000
MPI-201610-4R7	4.70	5	70	0.16±30%	900

Part No.	Inductance (μH)	TEST FREQ. MHz	SRF(MHz) Min.	DCR(Ω) Max	Rated Current Max.(mA)
MPI-252005-R60	0.60	5	100	0.11±30%	1500

Part No.	Inductance (μH)	TEST FREQ. MHz	SRF(MHz) Min.	DCR(Ω) Max	Rated Current Max.(mA)
MPI-252010-R68	0.68	5	100	0.06±30%	1400
MPI-252010-1R0	1.00	5	90	0.09±30%	1300
MPI-252010-1R2	1.20	5	80	0.09±30%	1200
MPI-252010-1R5	1.50	5	70	0.11±30%	1200
MPI-252010-2R2	2.20	5	60	0.13±30%	1100
MPI-252010-2R7	2.70	5	50	0.15±30%	1000
MPI-252010-4R7	4.70	5	40	0.18±30%	600

Part No.	Inductance (μH)	TEST FREQ. MHz	SRF(MHz) Min.	DCR(Ω) Max	Rated Current Max.(mA)
MPI-252012-R68	0.68	5	100	0.06±30%	1400
MPI-252012-1R0	1.00	5	90	0.09±30%	1300
MPI-252012-1R2	1.20	5	80	0.09±30%	1200
MPI-252012-1R5	1.50	5	70	0.11±30%	1200
MPI-252012-2R2	2.20	5	60	0.13±30%	1100
MPI-252012-2R7	2.70	5	50	0.15±30%	1100

Part No.	Inductance (μH)	TEST FREQ. MHz	SRF(MHz) Min.	DCR(Ω) Max	Rated Current Max.(mA)
MPI-321608-1R0	1.00	5	70	0.11±30%	1000
MPI-321608-1R5	1.50	5	70	0.11±30%	800
MPI-321608-4R7	4.70	5	35	0.25±30%	700

Part No.	Inductance (μH)	TEST FREQ. MHz	SRF(MHz) Min.	DCR(Ω) Max	Rated Current Max.(mA)
MPI-322507-R45	0.45	5	70	0.06 Max	2000
MPI-322507-R82	0.82	5	80	0.10 Max	1600
MPI-322507-1R0	1.00	5	120	0.12 Max	1300

Part No.	Inductance (μH)	TEST FREQ. MHz	SRF(MHz) Min.	DCR(Ω) Max	Rated Current Max.(mA)
MPI-321608-1R0	1.00	5	70	0.11±30%	1000
MPI-321608-1R5	1.50	5	70	0.11±30%	800
MPI-321608-4R7	4.70	5	35	0.25±30%	700

Part No.	Inductance (μH)	TEST FREQ. MHz	SRF(MHz) Min.	DCR(Ω) Max	Rated Current Max.(mA)
MPI-322510-R82	0.82	5	80	0.04±30%	1200
MPI-322510-1R5	1.50	5	60	0.06±30%	1000
MPI-322510-2R2	2.20	5	45	0.08±30%	800
MPI-322510-2R7	2.70	5	40	0.09±30%	800
MPI-322510-3R9	3.90	5	35	0.11±30%	600
MPI-322510-4R7	4.70	5	30	0.12±30%	500
MPI-322510-6R8	6.80	5	20	0.15±30%	400

Part No.	Inductance (μH)	TEST FREQ. MHz	SRF(MHz) Min.	DCR(Ω) Max	Rated Current Max.(mA)
MPI-322512-R11	0.11	5	175	0.016 Max	6000